This listing of the claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

Claim 1 (currently amended): A method for assessing muscle damage in a subject, comprising evaluating for the presence or absence of a peptide fragment of a myofilament protein or a covalent or non-covalent complex formation comprising a peptide fragment of a myofilament protein ~~modification product~~ in a biological sample obtained from a subject being assessed for muscle damage, wherein the presence of the peptide fragment of the myofilament protein ~~modification product~~ or the covalent or non-covalent complex formation comprising the peptide fragment of the myofilament protein in the biological sample is associated with muscle damage.

Claim 2 (currently amended): The method of claim 1, wherein the evaluating step comprises assessing the amount of the peptide fragment of the myofilament protein ~~modification product~~ or the covalent or non-covalent complex formation comprising the peptide fragment of the myofilament protein present in the biological sample, as an indication of the extent of muscle damage in the subject.

Claim 3 (currently amended): The method of claim 1, wherein the evaluating step comprises detecting the presence of at least two different peptide fragments of myofilament ~~protein modification products~~ proteins or covalent or non-covalent complex formations comprising a peptide fragment of a myofilament protein in the biological sample.

Claim 4 (currently amended): The method of claim 3, comprising assessing the amounts of said at least two different peptide fragments of myofilament ~~protein modification products~~ proteins or covalent or non-covalent complex formations comprising a peptide fragment of a myofilament protein present in the biological sample, and comparing the amounts as an indication of the extent of muscle damage in the subject.

Claim 5 (currently amended): A method for assessing muscle damage in a subject, comprising evaluating for the presence or absence of at least two different peptide fragments of myofilament ~~protein modification products~~ proteins or covalent or non-covalent complex formations comprising a peptide fragment of a myofilament protein in a biological sample wherein said at least two different peptide fragments of myofilament ~~protein modification products~~ proteins or covalent or non-covalent complex formations comprising a peptide fragment of a myofilament

protein are from the same protein.

Claim 6 (currently amended): The method of claim 3, wherein said at least two different peptide fragments of myofilament ~~protein modification products~~ proteins or covalent or non-covalent complex formations comprising a peptide fragment of a myofilament protein are from different proteins.

Claim 7 (currently amended): The method of claim 6, comprising assessing the ratio of said at least two different peptide fragments of myofilament ~~protein modification products~~ proteins or covalent or non-covalent complex formations comprising a peptide fragment of a myofilament protein, as an indication of the extent of muscle damage in the subject.

Claim 8 (currently amended): The method of claim 1, wherein evaluating for the presence or absence of a peptide fragment of a myofilament protein or covalent or non-covalent complex formation comprising a peptide fragment of a myofilament protein ~~modification product~~ comprises incubating the biological sample with a compound which specifically binds to the peptide fragment of the myofilament protein or covalent or non-covalent complex formation comprising a peptide fragment of a myofilament protein ~~modification product~~, under ~~condition~~ conditions which allow the compound to form a complex with the peptide fragment of the

myofilament protein ~~modification product~~ or covalent or non-covalent complex formation comprising a peptide fragment of a myofilament protein, and detecting the complex.

Claim 9 (original): The method of claim 8, wherein the compound is selected from the group consisting of an antibody, a functional fragment of an antibody, a protein, a protein fragment, a peptide, and a peptidomimetic.

Claim 10 (original): The method of claim 8, wherein the complex is detected by assaying for the presence of a label.

Claim 11 (original):The method of claim 8, wherein the compound is labeled with an enzyme which is detected by measuring enzymatic activity associated therewith.

Claim 12 (original): The method of claim 11, wherein the enzyme is selected from the group consisting of alkaline phosphatase, horseradish peroxidase, luciferase, beta-galactosidase, lysozyme, glucose-6-phosphate dehydrogenase, lactate dehydrogenase, and urease.

Claim 13 (original): The method of claim 8, wherein the compound is immobilized on a solid phase.

Claim 14 (original): The method of claim 13, wherein the solid phase is a plastic surface.

Claim 15 (original): The method of claim 1, wherein the muscle is selected from the group consisting of cardiac muscle and skeletal muscle.

Claim 16 (original): The method of claim 15, wherein the muscle damage is reversible.

Claim 17 (previously amended): The method of claim 16, wherein the muscle damage is due to at least one condition selected from the group consisting of hypoxia, hypoxemia, ischemia, fatigue and reperfusion.

Claim 18 (original): The method of claim 15, wherein the muscle damage is irreversible.

Claim 19 (original): The method of claim 18, wherein the muscle damage is due to at least one condition selected from the group consisting of hypoxia, hypoxemia, ischemia, and reperfusion.

Claim 20 (currently amended): The method of claim 1, wherein the peptide fragment of the myofilament protein ~~modification product~~ or covalent or non-covalent complex formation is from at least one myofilament protein selected from the group consisting of troponin 1, troponin T, troponin C, α-actinin, and myosin light chain 1.

Claim 21 (canceled)

Claim 22 (currently amended): The method of claim 8, wherein the muscle is cardiac muscle and the ~~myofilament protein modification product in~~ peptide fragment of the myofilament protein or covalent or non-covalent complex formation is a fragment of troponin I.

Claim 23 (original): The method of claim 22, wherein the compound binds to a region of troponin I comprising all or a portion of the amino acid sequence from residue 194 to residue 210.

Claim 24 (original): The method of claim 22, wherein the compound binds to a region of troponin I comprising all or a portion of the amino acid sequence from residue 1 to residue 193.

Claim 25 (currently amended): The method of claim 8, wherein the ~~myofilament protein is~~ peptide fragment of the myofilament protein or covalent or non-covalent complex formation is a fragment of myosin light chain 1.

Claim 26 (original): The method of claim 25, wherein the compound binds to a region of myosin light chain 1 comprising all or a portion of the amino acid sequence from residue 20 to residue 199.

Claim 27 (original): The method of claim 25, wherein the compound binds to a region of myosin light chain 1 comprising all

or a portion of the amino acid sequence from residue 1 to residue 19.

Claim 28 (original): The method of claim 1, wherein the biological sample is selected from the group consisting of cardiac muscle tissue, a component of cardiac muscle tissue, blood, blood serum, skeletal muscle tissue, a component of skeletal muscle tissue, and urine.

Claims 29-53 (canceled)

Claim 54 (currently amended): The method of ~~claim 53~~ claim 1 wherein the peptide fragment is selected from the group consisting of a peptide fragment of α- actinin, a carboxyl-terminal region of troponin I, an amino-terminal region of troponin I, a peptide fragment of troponin T, and a peptide fragment of myosin light chain 1.

Claim 55 (canceled)